

Name: _____

Date: _____

PART A

An expression is shown.

$$\frac{257 + 18}{25}$$

Which expressions have the same value as the expression shown?

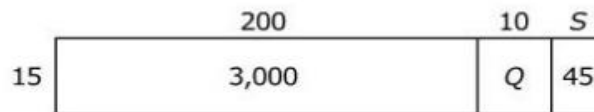
Select the **three** correct expressions.

- A. $\frac{257-18}{25}$
- B. $\frac{257}{25} + \frac{18}{25}$
- C. $(18 + 257) \div 25$
- D. $25 \div (257 + 18)$
- E. $257 \div 25 + 18 \div 25$
- F. $257 \div 25 - 18 \div 25$

PART B

An area model for division is shown. It can be used to find the value of the quotient of $3,195 \div 15$.

Area Model



- Determine the number that each letter represents in the area model.
- Explain completely how you determined the value of each letter.
- Explain how to determine the quotient of the division problem using the completed area model. Be sure to use the expression $3,195 \div 15$ in your explanation.

Enter your answer and your explanations in the space provided.



▼ Math symbols

+	-	×	÷
$\frac{\square}{\square}$	$\square \square$	(·)	[·]
=	<	>	≠
\$	°	?	

ANSWER KEY

Rubric Part A	
Score	Description
1	Student response includes the following components: <ul style="list-style-type: none"> • Computation component = 1 point <ul style="list-style-type: none"> ○ Correct answers, B, C and E.
0	Student response is incorrect or irrelevant.
Rubric Part B	
Score	Description
3	Student response includes the following 3 elements: <ul style="list-style-type: none"> • Reasoning component = 2 points <ul style="list-style-type: none"> ○ Valid explanation of how the value of each letter was determined ○ Valid explanation of how to find the quotient using the area model • Computation component = 1 point <ul style="list-style-type: none"> ○ Correct number for each letter in the model <p>Sample Student Response:</p> <p>The value of Q is 150 since $10 \times 15 = 150$. Then, from within the area model, $3000 + 150 + 45 = 3195$ The value of S is 3 since $15 \times 3 = 45$. So, $200 + 10 + 3 = 213$ And $15 \times 213 = 3195$ Since division undoes multiplication, $3195 \div 15 = 213$. OR other valid explanation.</p>
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.
Glow	Grow